



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I**
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PENNSYLVANIA 19406-2713

November 14, 2013

Mr. Michael J. Pacilio
Senior Vice President, Exelon Generation
President and Chief Nuclear Officer, Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

**SUBJECT: OYSTER CREEK NUCLEAR GENERATING STATION - NRC INTEGRATED
INSPECTION REPORT 05000219/2013004**

Dear Mr. Pacilio:

On September 30, 2013, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Oyster Creek Nuclear Generating Station. The enclosed inspection report documents the inspection results, which were discussed on November 7, 2013 with Mr. G. Stathes, Site Vice President, and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

This report documents one NRC-identified finding of very low safety significance (Green). This finding was determined to involve a violation of NRC requirements. However, because of the very low safety significance, and because it was entered into your corrective action program, the NRC is treating this finding as a non-cited violation (NCV), consistent with Section 2.3.2 of the NRC Enforcement Policy. If you contest the NCV in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN.: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspectors at Oyster Creek. In addition, if you disagree with the cross-cutting aspect assigned to the finding in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region I, and the NRC Resident Inspectors at Oyster Creek.

In accordance with 10 CFR 2.390 of the NRCs "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records component of the NRC's Agencywide Documents Access Management System (ADAMS). ADAMS is accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Gordon K. Hunegs, Chief
Reactor Projects Branch 6
Division of Reactor Projects

Docket Nos.: 50-219
License Nos.: DPR-16

Enclosure: Inspection Report 05000219/2013004
w/Attachment: Supplementary Information

cc w/encl: Distribution via ListServ

In accordance with 10 CFR 2.390 of the NRCs "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records component of the NRC's Agencywide Documents Access Management System (ADAMS). ADAMS is accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Gordon K. Hunegs, Chief
Reactor Projects Branch 6
Division of Reactor Projects

Docket Nos.: 50-219
License Nos.: DPR-16

Enclosure: Inspection Report 05000219/2013004
w/Attachment: Supplementary Information

cc w/encl: Distribution via ListServ

Distribution: (via email)

Distribution w/encl:

W. Dean, RA
D. Lew, DRA
D. Roberts, DRP
M. Scott, DRP
R. Lorson, DRS

J. Trapp, DRS
G. Hunegs, DRP
B. Bickett, DRP
A. Dugandzic, DRP
G. Stock, DRP
J. Kulp, DRP, SRI

Amar Patel, DRP, RI
J. DeVries, DRP, AA
D. Rich, RI OEDO
RidsNrrPMOysterCreek Resource
RidsNrrDorLpl1-2 Resource
ROPreports Resource

DOCUMENT NAME: G:\DRP\BRANCH6\+++OYSTER CREEK\OC INSPECTION REPORTS 2013\OC INTEGRATED
INSPECTION REPORT 2013004 final.DOCX

ADAMS Accession No.: ML13318A298

<input checked="" type="checkbox"/> SUNSI Review		<input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive		<input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available	
OFFICE	RI/DRP	RI/DRP	RI/DRP		
NAME <i>mmt</i>	JKulp/ GKH for	BBickett/ GKH for	GHunegs/ GKH		
DATE	11/12 /13	11/12/13	11/13/13		

OFFICIAL RECORD COPY

U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket Nos.: 50-219

License Nos.: DPR-16

Report No.: 05000219/2013004

Exelon: Exelon Nuclear

Facility: Oyster Creek Nuclear Generating Station

Location: Forked River, New Jersey

Dates: July 1, 2013 – September 30, 2013

Inspectors: J. Kulp, Senior Resident Inspector
A. Patel, Resident Inspector
J. DeMarshall, Operations Engineer
B. Dionne, Health Physicist
E. Burkett, Emergency Preparedness Inspector
J. Laughlin, Emergency Preparedness Inspector

Approved By: Gordon K. Hunegs, Chief
Reactor Projects Branch 6
Division of Reactor Projects

Enclosure

TABLE OF CONTENTS

SUMMARY OF FINDINGS.....	3
REPORT DETAILS	4
1. REACTOR SAFETY	4
1R01 Adverse Weather Protection.....	4
1R04 Equipment Alignment	7
1R05 Fire Protection	7
1R11 Licensed Operator Requalification Program	8
1R12 Maintenance Effectiveness	9
1R13 Maintenance Risk Assessments and Emergent Work Control	10
1R15 Operability Determinations and Functionality Assessments	10
1R18 Plant Modifications	11
1R19 Post-Maintenance Testing	11
1R20 Refueling and Other Outage Activities	12
1R22 Surveillance Testing	13
1EP4 Emergency Action Level and Emergency Plan Changes	13
1EP6 Drill Evaluation	13
2. RADIATION SAFETY	14
2RS1 Radiological Hazard Assessment and Exposure Controls	14
4. OTHER ACTIVITIES.....	17
4OA1 Performance Indicator Verification (71151).....	17
4OA6 Meetings, Including Exit.....	17
SUPPLEMENTARY INFORMATION.....	A-1
KEY POINTS OF CONTACT	A-1
LIST OF ITEMS OPENED, CLOSED, DISCUSSED, AND UPDATED	A-1
LIST OF DOCUMENTS REVIEWED.....	A-1

SUMMARY OF FINDINGS

IR 05000219/2013004; 07/01/2013 – 09/30/2013; Exelon Energy Company, LLC, Oyster Creek Generating Station; Adverse weather protection.

This report covered a three-month period of inspection by resident inspectors and announced inspections performed by regional inspectors. Inspectors identified one finding of very low safety significance (Green), which was an NCV. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). The cross-cutting aspect for the finding was determined using IMC 0310, "Components Within Cross-Cutting Areas." Findings for which the SDP does not apply may be Green, or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

Cornerstone: Mitigating Systems

Green. The inspectors identified a Green, non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, "Design Control," in that, Exelon did not ensure applicable regulatory requirements and design basis for the emergency diesel generators were correctly translated into instructions. Specifically, the inspectors determined that Exelon did not ensure that the design basis for flood control features was maintained and correctly translated into specifications, drawings, procedures and instructions for the installation of a security wall modification around the emergency diesel generator building which affected the probable maximum precipitation flood protection features of the building. Exelon entered this issue into the corrective action program for resolution as IR 1546148 and implemented corrective actions which included removing soil and re-grading the area adjacent to the building to improve the storm water runoff flow patterns.

The performance deficiency was more than minor because the finding affected the protection against external factors attribute of the mitigating systems cornerstone objective of ensuring the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined this finding involved the loss or degradation of equipment or function specifically designed to mitigate a seismic, flooding or severe weather initiating event; however, it did not involve the assumption that the protected equipment or safety function was completely failed or unavailable, and did not involve the total loss of any safety function, identified by Exelon through a PRA, IPEEE or similar analysis that contributes to external event initiated core damage accident sequences. Therefore, the inspectors determined the finding to be of very low safety significance (Green). This finding has a cross-cutting aspect in the area of Problem Identification and Resolution, because Exelon, beginning in 2009 and as recent as September 2012, did not thoroughly evaluate the problem such that the resolution addressed the cause of an issue that potentially impacted nuclear safety [P.1(c)]. (Section 1R01)

Other Findings

None.

REPORT DETAILS

Summary of Plant Status

Oyster Creek began the inspection period at 100 percent power. Oyster Creek reduced power periodically from July 2, 2013 to July 22, 2013 to comply with New Jersey Department of Environmental Protection thermal discharge permit limitations. On September 1, 2013, operators reduced power to 80% to perform a rod pattern adjustment and returned the reactor to 100% power on September 2, 2013. On September 6, 2013, operators lowered power to 95% to perform repairs on the level controls for a high pressure feed heater and returned the reactor to 100% power. On September 29, 2013, operators reduced power to approximately 25% to perform troubleshooting on the turbine speed control system. On September 30, 2013, operators commenced a planned reactor shutdown and entered the 1M30 planned maintenance outage to perform corrective maintenance on the turbine speed control system.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01 – 1 sample)

.1 External Flooding

a. Inspection Scope

During the week of July 24, 2013 and on August 13, 2013, the inspectors performed an inspection of the external flood protection measures for the Oyster Creek Nuclear Generating Station. The inspectors reviewed the UFSAR, Chapter 2.4.2, which depicted the design flood levels and protection areas containing safety-related equipment to identify areas that may be affected by external flooding. The inspectors conducted a general site walkdown of the emergency diesel generator building to ensure that Exelon erected flood protection measures in accordance with design specifications. The inspectors also reviewed operating procedures for mitigating external flooding during severe weather to determine if Exelon planned or established adequate measures to protect against external flooding events.

b. Findings

Introduction. The inspectors identified a Green, non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, "Design Control," in that, Exelon did not ensure applicable regulatory requirements and design basis for the emergency diesel generators were correctly translated into instructions. Specifically, Exelon did not ensure the design basis for the emergency diesel generator building probable maximum precipitation flood control features was maintained and correctly translated into instructions for installation of a security wall around the emergency diesel generator building.

Description. As described in the update final safety analysis report (UFSAR), Section 2.4.2.3, the probable maximum precipitation level is 23.5 feet above mean sea level (MSL). As stated in the Oyster Creek Individual Plant Examination for External Events (IPEEE), section 5.2.3, the emergency diesel generator building is at an elevation of 23.0 feet above MSL, therefore a six inch high asphalt dike was constructed to prevent water entry into the emergency diesel generator building. Additionally, AmerGen

(previous owner of Oyster Creek Nuclear Generation Station) letter, "Reply to a Request for Additional Information on IPEEE," dated August 17, 2000, Section III, states, "The ground surface is even with the top of the ramp at the Emergency Diesel Generator Building at Elevation 23.5 feet, and slopes down to the road at the north end of the building and the south side of the site to the south of the building. Precipitation will thus flow away from the entry without ponding."

On August 13, 2013, the inspectors performed a walk down of the emergency diesel generator building during a heavy rainstorm to determine if the flood protection features listed in the UFSAR for protection against external flooding of the building during a probable maximum precipitation event were adequate. The inspectors observed that rainwater was accumulating and flowing over the flood protection features into the emergency diesel generator building. The inspectors determined that the design features were not protecting the building against external flooding. Exelon entered the issue into their corrective action program as IR 1546148. As an immediate temporary corrective action, Exelon installed sandbags at the entrance of the emergency diesel generator building to mitigate the amount of water that would enter the building during a PMP event. Long term corrective actions were completed to re-grade the area such that water would not accumulate and enter the emergency diesel generator building.

The inspectors' review noted that in 2009, Exelon made several modifications throughout the site to improve security. One of the modifications was to install a solid security wall around the emergency diesel generator building. Modification design package, OC 09-00549, for the security wall was generated using Exelon procedure CC-AA-103, "Configuration Change Control for Permanent Physical Plant Changes." CC-AA-103, step 4.1.4, states: "Identify potential impacts of the change to the facility from a flooding perspective especially any change to the topography and assure that all affected analyses are updated and the impacts understood before allowing installation to begin." Additionally, CC-AA-103 directs the use of procedure CC-AA-102, "Design Input and Configuration Change Impact Screening," to determine applicable design considerations and impacts of the modification. CC-AA-102 provides a comprehensive listing of configuration change considerations that could impact the design basis of the system, structures and components.

CC-AA-102, step 4.1.38, identifies civil and structural requirements that must be addressed during the configuration change process. Sub-step 4.1.38.6 determines if the configuration change adversely affects the external and internal flooding analysis. Exelon's response to step 4.1.38 addressed other effects concerning civil and structural considerations but did not identify any effects on the flooding analysis. Further, CC-AA-102, step 4.1.14, determines changes to environmental conditions and resultant adverse environmental impacts of the modification. Environmental conditions include changes to floor drains, storm drains, ditches and swales. Exelon's response to step 4.1.14 identified that the installed security wall had the potential to increase water retention in the area between the wall and the emergency diesel generator building. Exelon reviewed the potential to increase water retention and determined the wall will not exacerbate the problem and may serve to limit water retention because the configuration of the wall is expected to redirect the rainfall runoff around and/or away from the emergency diesel generator building. As a result, the inspectors observed that no instructions were provided to the installation crew to grade the ground or to provide any improvements to address the interruption of stormwater runoff patterns described in licensing basis documents caused by installation of the solid security wall.

The inspectors determined evaluations to assess impacts on the emergency diesel generator as a result of the security modification were inadequate as evidenced when heavy rainstorm water entered the emergency diesel generator building. The inspectors also identified continuing opportunities for Exelon to re-evaluate or affirm the design of the security wall installation and its potential impact on the emergency diesel generators. In September 2012, the inspectors questioned the effect of the installation of the security wall and the apparent grading of the ground on the stormwater runoff patterns in the vicinity of the emergency diesel generator building. Specifically, the inspectors questioned the impact of not having the grading around the emergency diesel generator building sloped away from the emergency diesel generator building. Exelon entered this question into the corrective action program as IR 1410069. Exelon's response to IR 1410069 stated, in part, the ground around the emergency diesel generator consists of a thin layer of coarse gravel and sand, which allow for faster infiltration of water into the ground therefore this should mitigate the effects of water retention. No additional action, further evaluations or design reviews of the wall installation were performed.

Analysis. The inspectors determined that Exelon did not ensure the design basis for flood control features were correctly translated into instructions for the installation of a security wall around the emergency diesel generator building. The performance deficiency was more than minor because the finding affected the protection against external factors attribute of the mitigating systems cornerstone objective of ensuring the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, installation of the security wall changed the surface water runoff patterns and the grade of the ground which affected the flood protection of the emergency diesel generator during a probable maximum precipitation event.

The inspectors determined that this finding affected the external event mitigation systems portion of the Mitigating Systems cornerstone through the use of Table 2 of attachment 0609.04, "Initial Characterization of Findings." The inspectors evaluated the finding using "Exhibit 2 - Mitigating Systems Screening Questions" and "Exhibit 4 - External Events Screening Questions" of inspection manual chapter 0609, Appendix A. The inspectors determined this finding involved the loss or degradation of equipment or function specifically designed to mitigate a seismic, flooding or severe weather initiating event; however, it did not involve the assumption that the protected equipment or safety function was completely failed or unavailable, and did not involve the total loss of any safety function, identified by Exelon through a PRA, IPEEE or similar analysis that contributes to external event initiated core damage accident sequences. Therefore, the inspectors determined the finding to be of very low safety significance (Green).

This finding has a cross-cutting aspect in the area of Problem Identification and Resolution, because Exelon did not thoroughly evaluate a problem such that the resolution addressed the cause of an issue that potentially impacted nuclear safety. Specifically, since 2009 and as recent as September 2012, Exelon's evaluation was not adequate to evaluate the potential adverse impact of the security wall on the flood protection features of the emergency diesel generator building. (P.1(c))

Enforcement. 10 CFR 50 Appendix B, Criterion III, states, in part, that "measures shall be established to assure that applicable regulatory requirements and the design basis, as defined in § 50.2 and as specified in the license application, for those structures, systems, and components to which this appendix applies are correctly translated into specifications, drawings, procedures, and instructions." Contrary to the above, between

September 2009 and August 2013, Exelon did not properly translate the regulatory requirements of flood control measures into instructions for installation of a security wall which resulted in the flood control features of the emergency diesel generator building during a PMP to be inadequate. Because this violation was of very low safety significance and it was entered into Exelon's corrective action program as IR 1546148, this violation is being treated as an NCV, consistent with the Enforcement Policy. **(NCV 05000219/2013004-01, Physical Change To Security Feature Causes Flood Control Feature To Be Ineffective).**

1R04 Equipment Alignment

.1 Partial System Walkdowns (71111.04Q – 3 samples)

a. Inspection Scope

The inspectors performed partial walkdowns of the following systems:

- Containment spray system II while containment spray system I was out-of-service on July 8, 2013
- Emergency diesel generator I while emergency diesel generator II was out-of-service on September 9, 2013
- A isolation condenser while B isolation condenser was out-of-service on September 24, 2013

The inspectors selected these systems based on their risk-significance relative to the reactor safety cornerstones at the time they were inspected. The inspectors reviewed applicable operating procedures, system diagrams, the UFSAR, technical specifications, work orders, condition reports, and the impact of ongoing work activities on redundant trains of equipment in order to identify conditions that could have impacted system performance of their intended safety functions. The inspectors also performed field walkdowns of accessible portions of the systems to verify system components and support equipment were aligned correctly and were operable. The inspectors examined the material condition of the components and observed operating parameters of equipment to verify that there were no deficiencies. The inspectors also reviewed whether Exelon staff had properly identified equipment issues and entered them into the corrective action program for resolution with the appropriate significance characterization.

b. Findings

No findings were identified.

1R05 Fire Protection

.1 Resident Inspectors Quarterly Walkdowns (71111.05Q – 6 samples)

a. Inspection Scope

The inspectors conducted tours of the areas listed below to assess the material condition and operational status of fire protection features. The inspectors verified that Exelon controlled combustible materials and ignition sources in accordance with administrative procedures. The inspectors verified that fire protection and suppression

equipment was available for use as specified in the area pre-fire plan, and passive fire barriers were maintained in good material condition. The inspectors also verified that station personnel implemented compensatory measures for out of service, degraded, or inoperable fire protection equipment, as applicable, in accordance with procedures.

- Turbine building basement south (TB-FZ-11D) on July 18, 2013
- Feed pump room (TB-FZ-11F) on July 18, 2013
- Reactor building southeast corner room (RB-FZ-1F1) on July 19, 2013
- Reactor building (RB-FZ-1D) on July 19, 2013
- Reactor building (RB-FZ-1C) on July 19, 2013
- Fire water House (FW-FA-18) on August 8, 2013

b. Findings

No findings were identified.

.2 Fire Protection – Drill Observation (71111.05A – 1 sample)

a. Inspection Scope

The inspectors observed a fire brigade drill scenario conducted on September 10, 2013, that involved a fire in the A/B battery room. The inspectors evaluated the readiness of the plant fire brigade to fight fires. The inspectors verified that Exelon personnel identified deficiencies, openly discussed them in a self-critical manner at the debrief, and took appropriate corrective actions as required. The inspectors evaluated specific attributes as follows:

- Proper wearing of turnout gear and self-contained breathing apparatus
- Proper use and layout of fire hoses
- Employment of appropriate fire-fighting techniques
- Sufficient fire-fighting equipment brought to the scene
- Effectiveness of command and control
- Search for victims and propagation of the fire into other plant areas
- Smoke removal operations
- Utilization of pre-planned strategies
- Adherence to the pre-planned drill scenario
- Drill objectives met

The inspectors also evaluated the fire brigade's actions to determine whether these actions were in accordance with Exelon's fire-fighting strategies.

b. Findings

No findings were identified.

1R11 Licensed Operator Regualification Program (71111.11 – 3 samples)

.1 Quarterly Review of Licensed Operator Regualification Testing and Training

a. Inspection Scope

The inspectors observed licensed operator simulator training on July 10, 2013, which included inadvertent initiation of the A isolation condenser coincident with an anticipated transient without scram and subsequent large break loss of coolant accident. The inspectors also observed licensed operator simulator training on July 30, 2013, which included a small break loss of coolant accident with an anticipated transient without a scram. The inspectors evaluated operator performance during the simulated event and verified completion of risk significant operator actions, including the use of abnormal and emergency operating procedures. The inspectors assessed the clarity and effectiveness of communications, implementation of actions in response to alarms and degrading plant conditions, and the oversight and direction provided by the control room supervisor. The inspectors verified the accuracy and timeliness of the emergency classification made by the shift manager and the technical specification action statements entered by the shift technical advisor. Additionally, the inspectors assessed the ability of the crew and training staff to identify and document crew performance problems.

b. Findings

No findings were identified.

.2 Quarterly Review of Licensed Operator Performance in the Main Control Room

a. Inspection Scope

The inspectors observed the containment spray and emergency service water pump system 2 operability testing on August 1, 2013. The inspectors observed the pre-shift brief to verify that the briefing met the criteria specified in Exelon briefing and human performance procedures. Additionally, the inspectors observed crew performance to verify that procedure use, communications, and coordination of activities met established expectations and standards.

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12 – 3 samples)

a. Inspection Scope

The inspectors reviewed the samples listed below to assess the effectiveness of maintenance activities on SSC performance and reliability. The inspectors reviewed system health reports, corrective action program documents, maintenance work orders, and maintenance rule basis documents to ensure that Exelon was identifying and properly evaluating performance problems within the scope of the maintenance rule. For each sample selected, the inspectors verified that the SSC was properly scoped into the maintenance rule in accordance with 10 CFR 50.65 and verified that the (a)(2) performance criteria established by Exelon staff was reasonable. As applicable, for SSCs classified as (a)(1), the inspectors assessed the adequacy of goals and corrective actions to return these SSCs to (a)(2). Additionally, the inspectors ensured that Exelon staff was identifying and addressing common cause failures that occurred within and across maintenance rule system boundaries.

- Main feedwater system a(1) determination (IR 1520128) on July 31, 2013
- 'C' reactor recirculation pump 1st stage seal leakage (IR 1538141) on August 1, 2013
- 'A' emergency service water pump degraded breaker (IR 1511787) on September 5, 2013

b. Findings

No findings were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13 – 5 samples)

a. Inspection Scope

The inspectors reviewed station evaluation and management of plant risk for the maintenance and emergent work activities listed below to verify that Exelon performed the appropriate risk assessments prior to removing equipment for work. The inspectors selected these activities based on potential risk significance relative to the reactor safety cornerstones. As applicable for each activity, the inspectors verified that Exelon personnel performed risk assessments as required by 10 CFR 50.65(a)(4) and that the assessments were accurate and complete. When Exelon performed emergent work, the inspectors verified that operations personnel promptly assessed and managed plant risk. The inspectors reviewed the scope of maintenance work and discussed the results of the assessment with the station's probabilistic risk analyst to verify plant conditions were consistent with the risk assessment. The inspectors also reviewed the technical specification requirements and inspected portions of redundant safety systems, when applicable, to verify risk analysis assumptions were valid and applicable requirements were met.

- Containment spray system I out of service for planned maintenance on July 8, 2013
- Containment spray system II out of service for surveillance testing and a maximum emergency generation alert on July 16, 2013
- Reactor protection system I and main steam line temperature unexpected alarms on August 25, 2013
- Emergency diesel generator II and B control rod drive pump out of service for planned maintenance on September 9, 2013
- 'B' isolation condenser and remote shutdown panel out of service for planned surveillance testing on September 25, 2013

b. Findings

No findings were identified.

1R15 Operability Determinations and Functionality Assessments (71111.15 – 3 samples)

a. Inspection Scope

The inspectors reviewed operability determinations for the following degraded or non-conforming conditions:

- Increase in drywell temperature on July 17, 2013
- Turbine bypass #4 valve inoperable on July 23, 2013
- Increase in trunnion room temperature on July 25, 2013

The inspectors selected these issues based on the risk significance of the associated components and systems. The inspectors evaluated the technical adequacy of the operability determinations to assess whether technical specification operability was properly justified and the subject component or system remained available such that no unrecognized increase in risk occurred. The inspectors compared the operability and design criteria in the appropriate sections of the technical specifications and UFSAR to Exelon's evaluations to determine whether the components or systems were operable. Where compensatory measures were required to maintain operability, the inspectors determined whether the measures in place would function as intended and were properly controlled by Exelon. The inspectors determined, where appropriate, compliance with bounding limitations associated with the evaluations.

b. Findings

No findings were identified.

1R18 Plant Modifications (71111.18 – 3 samples)

.1 Temporary Modifications

a. Inspection Scope

The inspectors reviewed the temporary modifications listed below to determine whether the modifications affected the safety functions of systems that are important to safety. The inspectors reviewed 10 CFR 50.59 documentation and post-modification testing results, and conducted field walkdowns of the modifications to verify that the temporary modifications did not degrade the design bases, licensing bases, and performance capability of the affected systems.

- Engineering Change Package OC-13-00226 – Temporary change to jumper out the M1B transformer thermal detector trouble alarm
- Engineering Change Package OC-13-00304 – Temporary change to modify the drywell equipment drain tank control logic
- Engineering Change Package OC-13-00378 – Temporary change for main steam line tunnel temperature sensors

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing (71111.19 – 5 samples)

a. Inspection Scope

The inspectors reviewed the post-maintenance tests for the maintenance activities listed below to verify that procedures and test activities ensured system operability and functional capability. The inspectors reviewed the test procedure to verify that the procedure adequately tested the safety functions that may have been affected by the maintenance activity, that the acceptance criteria in the procedure was consistent with the information in the applicable licensing basis and/or design basis documents, and that the procedure had been properly reviewed and approved. The inspectors also

witnessed the test or reviewed test data to verify that the test results adequately demonstrated restoration of the affected safety functions.

- Standby gas treatment system 2 after corrective maintenance (M2330598) on July 25, 2013
- Diesel fire pump 1 after biennial preventive maintenance (R2187093) on August 8, 2013
- 4160v fire panel after corrective maintenance (M2335952) on August 15, 2013
- Average power range monitor #7 after corrective maintenance (C2030489) on August 19, 2013
- 'B' isolation condenser after preventive maintenance (R2119252) on September 24, 2013

b. Findings

No findings were identified.

1R20 Refueling and Other Outage Activities (71111.20 – 1 sample)

a. Inspection Scope

The inspectors reviewed the station's work schedule and outage risk plan for the 1M30 maintenance outage, which started on September 29, 2013. The inspectors reviewed Exelon's development and implementation of outage plans and schedules to verify that risk, industry experience, previous site-specific problems, and defense-in-depth were considered. The startup from this outage will be documented in inspection report 05000219/2013005. During the outage, the inspectors observed portions of the shutdown and cooldown processes and monitored controls associated with the following outage activities:

- Configuration management, including maintenance of defense-in-depth, commensurate with the outage plan for the key safety functions and compliance with the applicable technical specifications when taking equipment out of service
- Implementation of clearance activities and confirmation that tags were properly hung and that equipment was appropriately configured to safely support the associated work or testing
- Status and configuration of electrical systems and switchyard activities to ensure that technical specifications were met
- Monitoring of decay heat removal operations
- Reactor water inventory controls, including flow paths, configurations, alternative means for inventory additions, and controls to prevent inventory loss
- Activities that could affect reactivity
- Maintenance of secondary containment as required by technical specifications
- Identification and resolution of problems related to outage activities

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22 – 4 samples)a. Inspection Scope

The inspectors observed performance of surveillance tests and/or reviewed test data of selected risk-significant SSCs to assess whether test results satisfied technical specifications, the UFSAR, and Exelon procedure requirements. The inspectors verified that test acceptance criteria were clear, tests demonstrated operational readiness and were consistent with design documentation, test instrumentation had current calibrations and the range and accuracy for the application, tests were performed as written, and applicable test prerequisites were satisfied. Upon test completion, the inspectors considered whether the test results supported that equipment was capable of performing the required safety functions. The inspectors reviewed the following surveillance tests:

- 646.4.036, Fire pump #2 operability test on July 2, 2013
- 609.4.007, Fire water makeup to isolation condensers in-service test on July 3, 2013
- 651.4.003, Standby gas treatment system #2 10 hour operability test on August 19, 2013
- 610.3.215, Core spray system #2 operability test on September 13, 2013

b. Findings

No findings were identified.

Cornerstone: Emergency Preparedness1EP4 Emergency Action Level and Emergency Plan Changes (IP 71114.04 – 1 sample)a. Inspection Scope

Nuclear Security and Incident Response (NSIR) staff performed an in-office review of the latest revisions of various Emergency Plan Implementing Procedures (EPIPs) and the emergency plan located under ADAMS accession numbers ML13162A199 and ML13200A124 as listed in the Attachment.

Exelon determined that in accordance with 10 CFR 50.54(q), the changes made in the revisions resulted in no reduction in the effectiveness of the emergency plan, and that the revised emergency plan continued to meet the requirements of 10 CFR 50.47(b) and Appendix E to 10 CFR Part 50. The NRC review was not documented in a safety evaluation report and did not constitute approval of Exelon generated changes; therefore, this revision is subject to future inspection. The specific documents reviewed during this inspection are listed in the attachment.

b. Findings

No findings were identified.

1EP6 Drill Evaluation (71114.06 – 2 samples).1 Emergency Preparedness Drill Observation

a. Inspection Scope

The inspectors evaluated the conduct of routine Exelon emergency drills on July 10, 2013 and on July 24, 2013 to identify any weaknesses and deficiencies in the classification, notification, and protective action recommendation development activities. The inspectors observed emergency response operations in the simulator and emergency operations facility to determine whether the event classification, notifications, and protective action recommendations were performed in accordance with procedures. The inspectors also reviewed the station drill critique to compare inspectors' observations with those identified by Exelon staff in order to evaluate Exelon's critique and to verify whether the Exelon staff was properly identifying weaknesses and entering them into the corrective action program.

b. Findings

No findings were identified.

2. RADIATION SAFETY

Cornerstone: Public Radiation Safety and Occupational Radiation Safety

2RS1 Radiological Hazard Assessment and Exposure Controls (71124.01)

a. Inspection Scope

The inspectors reviewed and assessed Exelon's performance in assessing the radiological hazards and exposure control in the workplace, from July 8–12, 2013. The inspectors used the requirements in 10 CFR Part 20, and guidance in Regulatory Guide (RG) 8.38, Control of Access to High and Very High Radiation Areas for Nuclear Plants, Technical Specifications (TS) and Exelon's procedures required by TS as criteria for determining compliance. The inspectors reviewed 2013 Exelon's performance indicators for the occupational exposure cornerstone for Oyster Creek Generating Station (OCGS), the results of radiation protection (RP) program audits, and any reports of operational occurrences related to occupational radiation safety since the last inspection.

Radiological Hazard Assessment

The inspectors determined if there had been changes to plant operations since the last inspection that may have resulted in a significant new radiological hazard for onsite workers or members of the public. The inspectors reviewed the last two radiological surveys from the Reactor Water Clean-up System and Transverse In-Core Probe cubicle and conducted walk-downs and independent radiation measurements in the facility, including radioactive waste processing, storage, and handling areas. The inspectors observed work activities associated with the backwash of the condensate demineralizer pre-filter and reviewed the radiological surveys that were performed. The inspectors evaluated whether continuous air monitors were sufficiently sensitive and were located in areas that were representative of actual work areas. The inspectors evaluated the Exelon program for monitoring levels of loose surface contamination in areas of the plant.

Instructions to Workers

The inspectors selected five containers of radioactive materials. The inspectors assessed whether the containers were labeled and controlled in accordance with requirements. The inspectors reviewed radiation work permit (RWP) No. 2013-02200, TB 23' Condensate Pre Filter Backwash. This RWP was used to access high radiation areas (HRA) and evaluated if the specified work control instructions and control barriers were consistent with applicable requirements. For this RWP, the inspectors assessed whether allowable stay times or permissible doses for radiologically significant work under each RWP were clearly identified. The inspectors evaluated whether electronic personnel dosimeter (EPD) alarm set-points were in conformance with survey indications and plant procedural requirements. The inspectors reviewed two occurrences where a worker's EPD noticeably malfunctioned or alarmed. The inspectors assessed whether the issue was included in the corrective action program and whether compensatory dose evaluations were conducted, as appropriate.

Contamination and Radioactive Material Control

The inspectors observed five locations where Exelon monitors material leaving the radiological control area and inspected the methods used for control, survey, and release of these materials. These locations were: Turbine Building Access, Third Floor Main Office Building, Low-Level Radwaste Storage Building, Condensate Storage Pump House, and Main Access Control. The inspectors observed the performance of personnel surveying and releasing material for unrestricted use. The inspectors assessed whether the radiation monitoring instrumentation used for equipment release and personnel contamination surveys had appropriate sensitivity for the type(s) of radiation present. The inspectors reviewed Exelon's criteria for the survey and release of potentially contaminated material. The inspectors reviewed Exelon's procedures and records to verify that the radiation detection instrumentation was used at expected alarm sensitivity. The inspectors selected licensed sealed sources from the Exelon inventory records and assessed whether the sources were accounted for, and were tested for loose surface contamination as required. The inspectors evaluated whether any recent transactions involving nationally tracked sources were reported in accordance with requirements.

Radiological Hazards Control and Work Coverage

The inspectors evaluated radiological conditions and performed independent radiation measurements during walk-downs of the facility. The inspectors assessed whether the conditions were consistent with applicable posted surveys, RWPs, and associated worker briefings. The inspectors evaluated the adequacy of radiological controls, such as required surveys, radiation protection job coverage and contamination controls. The inspectors assessed whether personnel monitoring devices were properly used in the plant. The inspectors assessed whether the dosimeter was placed in the location of highest expected dose or that Exelon properly implemented an NRC-approved method of determining effective dose equivalent. The inspectors examined Exelon's physical and program controls for highly activated materials stored within the spent fuel and other storage pools.

Risk-Significant High Radiation Area and Very High Radiation Area Controls

The inspectors discussed with Exelon changes to the controls and procedures for high-risk high radiation areas and very high radiation areas. The inspectors discussed with first-line supervisors the controls in place for special areas that have the potential to become very high radiation areas during certain plant operations. The inspectors evaluated Exelon controls for locked high radiation areas and areas with the potential to become a very high radiation area.

Radiation Worker Performance

The inspectors observed the performance of radiation workers based on radiological protection work requirements. The inspectors assessed whether workers were aware of the radiological conditions in their workplace and the radiological work permit controls/limits in place. The inspectors reviewed two radiological problem reports since the last inspection that attributed to the cause of the event to human performance errors. The inspectors assessed whether this perspective matched the corrective action approach taken by Exelon to resolve the reported problems.

Radiological Protection Technician Proficiency

The inspectors observed the performance of the radiological protection technicians with respect to controlling radiation work. The inspectors reviewed one radiological problem report generated since the last inspection that attributed the cause of the event to radiological protection technician error. The inspectors assessed whether this perspective matched the corrective action approach taken by Exelon to resolve the reported problems.

Problem Identification and Resolution

The inspectors determined that issues associated with radiation monitoring and exposure control were being identified at an appropriate threshold and were properly addressed for resolution in Exelon's corrective action program. The inspectors assessed the appropriateness of the corrective actions for a selected sample of problems documented by Exelon that involve radiation monitoring and exposure controls. The inspectors assessed Exelon process for applying operating experience to their plant.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

.1 Reactor Coolant System (RCS) Specific Activity and RCS Leak Rate (2 samples)

a. Inspection Scope

The inspectors reviewed Exelon's submittal for the RCS specific activity and RCS leak rate performance indicators for both Unit 1 and Unit 2 for the period of July 1, 2012 through June 30, 2013. To determine the accuracy of the performance indicator data reported during those periods, the inspectors used definitions and guidance contained in NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6. The inspectors also reviewed RCS sample analysis and control room logs of daily measurements for RCS leakage, and compared that information to the data reported by the performance indicator.

b. Inspection Findings

No findings were identified.

4OA6 Meetings, Including Exit

On November 7, 2013, the inspectors presented the inspection results to Mr. G. Stathes, Site Vice President, and other members of the Oyster Creek staff. The inspectors verified that no proprietary information was retained by the inspectors or documented in this report.

ATTACHMENT: SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION**KEY POINTS OF CONTACT**Exelon Personnel

G. Stathes, Site Vice-President
 R. Peak, Plant Manager
 M. Ford, Director, Operations
 G. Malone, Director, Engineering
 J. Dostal, Director, Maintenance
 C. Symonds, Director, Training
 D. DiCello, Director, Work Management
 M. McKenna, Manager, Regulatory Assurance
 T. Farenga, Radiation Protection Manager
 J. Renda, Manager, Environmental/Chemistry
 T. Keenan, Manager, Site Security
 P. Bloss, Senior Manager, Plant Engineering
 H. Ray, Senior Manager, Design Engineering
 E. Swain, Shift Operations Superintendent
 J. Chrisley, Regulatory Assurance Specialist
 D. Moore, Regulatory Assurance Specialist
 K. Paez, Regulatory Assurance Specialist

LIST OF ITEMS OPENED, CLOSED, DISCUSSED, AND UPDATEDOpened/Closed

05000219/2013004-01	NCV	Physical Change To Security Feature Causes Flood Control Feature To Be Ineffective (Section 1R01)
---------------------	-----	---

LIST OF DOCUMENTS REVIEWED**Section 1R01: Adverse Weather Protection**Procedures

CC-AA-103, Configuration Change Control For Permanent Physical Plant Changes, Revision 25
 EN-AA-103, Environmental Review, Revision 4
 CC-AA-102, Design Input and Configuration Change Impact Screening, Revision 27

Condition Reports

1543148	1560629	1434344	1546148	1548260	1410069
1404344					

Work Orders

A2228056	A2336218	C2021630	M2336218	A2024731	A2222266
----------	----------	----------	----------	----------	----------

Drawings

06-121-203, As-Built Survey Diesel Generator Building Security, Revision 0
4020-1, Emergency Diesel Generator Vault Plans, Sections & Details, dated August 1, 1967
GE 207A6068, Section View Emergency Diesel Generator (EDG) No 2 Switchgear U-3,
Revision 0
M0356, General Arrangement Diesel Generator Building Plan at El. 23'-0" & 37'-0", Revision 4
3E-121-31-1000, Diesel Generator Bldg. Yard Fl. Drain Shutoff Valve & Storm Drain Piping Sys,
Plan, Sections, Details, Revision 1

Miscellaneous

GPU Nuclear letter, "Oyster Creek Nuclear Generating Station, Docket No. 50-219, SEP Topic
No. II-3-C, Flooding Potential and Protection Requirements", dated June 6, 1983
Energys Ironclad Diesel Starting Batteries Specifications, Revision F, dated April 2007
Oyster Creek Individual Plant Examination for External Events (IPEEE), dated December 1,
1995
Component History Work Order Closure Remarks Report for System 157, dated October 15,
2013
NUREG 0822, Supplement 1, Integrated Plant Safety Assessment, Systematic Evaluation
Program, Oyster Creek Nuclear Generating Station, dated July, 1988
AmerGen Letter, "Oyster Creek Generating Station, Docket No. 50-219, Reply to RAI on
IPEEE), dated August 17, 2000
Oyster Creek Nuclear Generating Station Updated Final Safety Analysis Report section 2.4.8,
"Flooding Protection Requirement", Revision 16
Component History Work Order Closure Remarks Report for System 157, dated September 18,
2013
OC-09-00549, ECR: Security Force-On-Force Changes for EDG Bldg Protection, Revision 1
OC-06-00316, ECR: EDG Building East Entrance Water Retention, Revision 2
OC-CCD-328384-001, Configuration Change Documentation, Diesel Generator Floor Drain
Shutoff Valve and Storm Drain Piping System, Revision 0

Section 1R04: Equipment Alignment

Procedures

310, Containment Spray System Operation, Revision 104
307, Isolation Condenser System, Revision 123
341, Emergency Diesel Generator Operation, Revision 105

Drawings

GE 148F740, Sheet 1, Containment Spray System Flow Diagram, Revision 43

Section 1R05: Fire Protection

Procedures

OP-OC-201-008, Oyster Creek Pre-Fire Plans, Revision 16
OP-AA-201-009, Control of Transient Combustible Material, Revision 12
OP-OC-201-008-1027, Turbine Building Basement South (3'-6" Elevation), Revision 2
OP-OC-201-008-1029, Feed Pump Room (0'-6" & 3'-6" Elevations), Revision 1
OP-OC-201-008-1008, Reactor Building (-19' Elevation), Revision 0
OP-OC-201-008-1008, Reactor Building (51' Elevation), Revision 1
OP-OC-201-008-1003, Reactor Building (-19' Elevation), Revision 1
OP-OC-201-008-1038, Fire Water House (Pond Area), Revision 1

Miscellaneous

Fire Drill Scenario for A/B Battery Room, dated September 10, 2013

Fire Drill Record Sheet for A/B Battery Room, Crew D, dated September 10, 2013

Section 1R11: Licensed Operator Requalification ProgramProcedures

607.4.017, Containment Spray and Emergency Service Water Pump System 2 Operability and Quarterly Inservice Test, Revision 33

Condition Reports

1539216 1539184 1538800 1538777

Work Orders

R2222971

Miscellaneous

Oyster Creek July 10, 2013 DEP Training Drill, 7/10/2013

Oyster Creek Station License Operator Requalification Training Simulator Exercise Guide
Scenario 13-5.1, Revision 1

Section 1R12: Maintenance EffectivenessProcedures

ER-AA-310, Implementation of the Maintenance Rule, Revision 8

ER-AA-310-1001, Maintenance Rule Scoping, Revision 4

ER-AA-310-1003, Maintenance Rule – Performance Criteria Selection, Revision 4

ER-AA-310-1005, Maintenance Rule – Dispositioning between (A1) and (A2), Revision 6

ABN-17, Feedwater System Abnormal Conditions, Revision 15

Condition Reports

1538141 1530337 1520128 1518353 1518638 1518661
1518824

Section 1R13: Maintenance Risk Assessments and Emergent Work ControlProcedures

OP-AA-108-117, Rev 003, Protected Equipment Program, Revision 3

WC-AA-104, Integrated Risk Management, Revision 18

WC-OC-101-1001, On-line Risk Management and Assessment, Revision 14

310, Containment Spray System Operation, Revision 104

ABN-60, Grid Emergency, Revision 13

WC-AA-101, On-Line Work Control Process, Revision 19

Drawings

GE 148F740, Sheet 1, Containment Spray System Flow Diagram, Revision 43

GE 237E566, Sheet 2, Reactor Protection System Electrical Elementary Diagram, Revision 46

Condition Reports

1550576 1550330 1551775 1550224

Maintenance Orders/Work Orders

A2334405

Miscellaneous

Operations Department Compensatory Action Report, dated August 29, 2013

Operations Department Protected Equipment Report, dated August 29, 2013

Section 1R15: Operability Determinations and Functionality AssessmentsProcedures

OP-AA-108-115, Operability Evaluation, Revision 11

625.4.002, Main Turbine Surveillances, Revision 90

651.4.003, Standby Gas Treatment System 10-Hour Run – System 2, Revision 6

RAP-C8h, DW Temp Hi, Revision 1

EMG-SP26, Support Procedure 26 Determining Bulk Drywell Temperature, Revision 1

681.4.004, Technical Specification Log Sheet, Revision 26

EMG-3200.02, Primary Containment Control, Revision 19A

Condition Reports

1536776 1532601 1532592 1538924 1538685 1533116

1538925

Miscellaneous

Adverse Condition Monitoring and Contingency Plan, DW Bulk Temperature, Revision 1

OC-2013-OE-0008, Turbine Bypass Valve #4, Revision 0

Section 1R18: Plant ModificationsProcedures

101.2, Fire Protection Program, Revision 69

LS-AA-104-1003, 50.59 Screening Form, Revision 3

619.3.010, Main Steam Line Tunnel High Temperature Sensor Functional Test, Revision 13

Drawings

GE 237E566, Sheet 2, Reactor Protection System Electrical Elementary Diagram, Revision 46

Condition Reports

1514818 1529347 1535290 1440929 1441114 1549410

1550576 1550330 1551775 1550224

Work Orders

A2329696 C2030444 A2334405

Miscellaneous

OC-13-00226, TCCP at FD-665-700 for M1B Thermal Detector Trouble Alarm, Revision 2

OC-13-00304, TCCP for Drywell Equipment Drain Tank Control Logic, Revision 0

Oyster Creek Nuclear Generating Station UFSAR, Section 7.3.1.1.1, Reactor Protection System, Revision 15

Oyster Creek Nuclear Generating Station UFSAR, Section 15.1.5, Steam System Piping Failures Outside Containment, Revision 17

C-1302-6411-5320-001, O.C. Main Steam Tunnel Temperature Detector Modification, dated April 10, 1984
 OC-641-A, Division System Design Description for Main Steam Line Tunnel Temperature Detectors Modification – Oyster Creek, Revision 0
 LP 2621.828.0.0037, Lesson Plan – Reactor Protection System, Revision 12
 2611-PGD-2621, Lesson Plan - Reactor Protection System, Revision 12
 Oyster Creek Nuclear Generating Station Technical Specification 3.1, Protective Instrumentation, Amendment 235
 OC-2013-E-0002, 50.59 Evaluation: TCCP to Jumper Out TS-IB0010E and TS-IB0010F, Revision 2
 OC-2013-S-0061, 50.59 Screening: TCCP to Jumper Out TS-IB0010E and TS-IB0010F, Revision 0
 OC-13-00378, Engineering Change Request: TCP to Jumper Out TS-IB-0010E and TS-IB-0010F, Revision 2

Section 1R19: Post-Maintenance Testing

Procedures

MA-AA-716-012, Post Maintenance Testing, Revision 17
 651.4.003, Standby Gas Treatment System 10-Hour Run – System 2, Revision 6
 645.4.001, Fire Pump #1 Operability Test, Revision 69
 645.4.018, Fire Pump Monitoring Test, Revision 65

Condition Reports (*NRC-identified)

1527568*	1513444	1022923	1545030*	1546038
----------	---------	---------	----------	---------

Maintenance Orders/Work Orders

R2222981	A2330598	M2330598	R2187093	R2167460	C2030168
R2212816	R2215511	M2335952	C2030489	A2330883	

Section 1R20: Refueling and Other Outage Activities

Procedures

201, Plant Startup, Revision 85
 ER-AA-600-1043, Shutdown Risk Management, Revision 5
 203, Plant Shutdown, Revision 70
 305, Shutdown Cooling System Operation, Revision 116

Section 1R22: Surveillance Testing

Procedures

609.4.007, Fire Water Makeup to Isolation Condensers IST, Revision 20
 316.1, Condensate Transfer System, Revision 57
 645.4.036, Fire Pump #2 Operability Test, Revision 22
 651.4.003, Standby Gas Treatment System 10-Hour Run – System 2, Revision 8

Condition Reports

1548092

Work Orders

R2221801	R2214836	R2225393
----------	----------	----------

Section 1EP4: Emergency Action Level and Emergency Plan Changes

EP-AA-110-200, "Dose Assessment," Revision 5
 EP-AA-110-201, "On Shift Dose Assessment," Revision 1
 EP-AA-1010, "Radiological Emergency Plan Annex," Revision 7

Section 1EP6: Drill EvaluationProcedures

EP-AA-112-1 00-F-01, Shift Emergency Director Check List, Revision S
 EP-AA-114-F-02, BWR Release in Progress Determination Guidance, Revision A
 EP-AA-114-100-F-03, State/Local Notification Form, Revision G
 EP-AA-122-1002-F-02, Drill & Exercise Objective Evaluation Data Tables, Revision B

Condition Reports

1534870	1535086	1539216	1539184	1538777	1538800
1538795	1549555				

Miscellaneous

Oyster Creek July 10, 2013 DEP Training Drill, 7/10/2013
 Oyster Creek Nuclear Generating Station, July 10, 2013 & July 24, 2013 Emergency
 Preparedness Integrate Drills Combined Report (2013-05), dated August 22, 2013

Section 2RSO1: Radiological Hazard Assessment and Exposure ControlsProcedures

LS-AA-1120, Reportable Event RAD, Revision 16
 RP-AA-14, Radioactive Material Control Program Description, Revision 2
 RP-AA-221, Review Correction and Analysis of Whole Body Count Data, Revision 2
 RP-AA-300, Radiological Survey Program, Revision 9
 RP-AA-300-1005, Removing Items from the Spent Fuel Pool, Reactor Cavity and Equipment
 Pit, Revision 0
 RP-AA-301, Radiological Air Sampling Program, Revision 6
 RP-AA-302, Determination of Alpha Levels and Monitoring, Revision 5
 RP-AA-350, Personnel Contamination Monitoring, Decontamination and Reporting, Revision 11
 RP-AA-376, Radiological Postings, Labeling and Markings, Revision 7
 RP-AA-400-1004, Emergent Dose Control and Authorization, Revision 5
 RP-AA-402-1002, Radiological Risk Management, Revision 4
 RP-AA-460, Controls for High and Locked High Radiation Areas, Revision 24
 RP-AA-460-001, Controls for Very High Radiation Areas, Revision 004
 RP-AA-460-002, Additional High Radiation Exposure Control, Revision 1
 RP-AA-460-003, Access to HRAs/LHRAs and VHRA and Contaminated Areas, Revision 5
 RP-AA-500, Radioactive Material (RAM) Control, Revision 15
 RP-AA-500-1001, Requirements for Radioactive Material Stored Outdoors, Revision 3
 RP-AA-500-1002, Incoming Survey Requirements for Non-Radioactive Tools and Equipment,
 Revision 1
 RP-AA-503-F-01, Unconditional Release Instructions Using SAM for Personnel Items used in
 the RCA but not in Contaminated Areas, Revision 0
 RP-AA-700-1300, Calibration, Operation and Source Check of the Eberline Beta Air Monitor
 Model AMS-3, Revision 2

RP-AA-700-1301, Calibration, Source Check, Operation and Set-up of the Eberline Beta Air Monitor Model AMS-4, Revision 0
 RP-AA-800, Control, Inventory, and Leak Testing of Radioactive Sources, Revision 7
 RP-AA-825, Maintenance, Care and Inspection of Respiratory Protective Equipment, Revision 6
 RP-AA-1004, Radiation Protection Stop-work Authority and Corporate RPM Event Notification, Revision 7
 RP-OC-15, Radiological Protection Controlled Keys, Revision 2
 Normandeau Procedure Collection of Groundwater Samples for Radiological Analysis, Revision 3

Condition Reports

1471662	1472939	1375607	1347605	1351173	1335233
1328452	1448398	1430560	1430565	1534528	1534295

Miscellaneous

Oyster Creek Updated Safety Analysis Report, Revision 16
 LS-AA-126-1005, 2013 Check-in Self-assessment for AR 1459423, Nuclear Regulatory Commission Inspection IP 71124.01 Radiation Hazard and Exposure Controls, dated June 12, 2013
 Radiation Work Permit No. 2013-02200, TB 23' Condensate Pre Filter Backwash, dated January 1, 2013
 Radiation Survey No. REQ 13-02837, RB 51' Clean-up System Area & Sample Sink, dated May 18, 2013
 Radiation Survey No. REQ 13-02305, RB 51' Clean-up System Area & Sample Sink, dated April 20, 2013
 Radiation Survey No. RDM 13-03308, RX 38' TIP Drive Area, dated June 11, 2013
 Radiation Survey No. RDM 13-03308, RX 38' TIP Drive Area, dated May 14, 2013
 Radiation Survey No. TE213-01047 Turbine Building Condensate Demin Filters, dated February 22, 2013
 Radiation Survey No. TE213-03914 Turbine Building Condensate Demin Filters, dated July 11, 2013
 RP-AA-301 Attachment 2, Airborne Radioactivity Calculation Sheet for 13-600 Old Radwaste Pipe Tunnel, dated June 12, 2013
 RP-AA-301 Attachment 2, Airborne Radioactivity Calculation Sheet for 13-601 Old Radwaste Large Pump Room, dated June 12, 2013
 LHRA Key Inventory Key List, dated July 8, 2013
 RP-JS-15, Radiological Protection Controlled Keys Attachment 2, Month of July 2013
 OCNGS Exempt Quantity Sources Inventory, dated July 8, 2013
 OCNGS Licensed Quantity Sources Inventory, dated July 8, 2013
 WC-AA-111 for RP-AA-800, Source Leak Test Record. dated May 3, 2013
 RP-AA-800 Attachment 2 Source Leak Test Record dated January 30, 2012
 LS-AA-104-1001, 50.59 Evaluation Coversheet Form: Temporary Shielding in REBDT Grating > 90 d Temp Shield No. 2012-69, dated October 19, 2012
 LS-AA-104-1001, 50.59 Evaluation Coversheet Form: Temporary Scaffolding in EI 51, Rx Building Cleanup Area Hallway- WO R20933337
 LS-AA-104-1001, 50.59 Review Coversheet Form Revision to SER for the On-Site Low Level Radioactive Waste Storage Facility/SER-402533-001 SER for the On-Site Low Level Waste Storage Facility, dated June 5, 2013

GPU Nuclear Radiological Engineering Calculation No.2820-00-001, Dose due to Resin/Filter Sludge and Dray Active Waste Fire at the Low Level Rad Waste Storage Facility, dated February 9, 2009
SER-402533-001 Safety Evaluation Report in Support of an On-Site Low Level Waste Storage Facility at Oyster Creek Nuclear Generating Station, Revision 5

Section 40A1: Performance Indicator Verification

Miscellaneous

NEI 99-02, Regulatory Assessment Performance Indicator Guideline, Revision 6
Oyster Creek Technical Specification 3.6.A, Reactor Coolant Radioactivity, Amendment 255
Oyster Creek Technical Specification 3.3.D, Reactor Coolant System Leakage, Amendment 133
Chemistry analysis result spread sheet for July 1, 2012 through June 30, 2013
Oyster Creek Operating Logs, July 1, 2012 through June 30, 2013